

Claims

- [c1] 1.A coil winding arrangement for a rotating electrical machine comprising a ring having a plurality of radially extending pole teeth, a first coil winding having individual coils encircling a first number of circumferentially spaced pole teeth and a second coil winding encircling a second number of circumferentially spaced pole teeth including at least some of the pole teeth encircled by said first coil winding.
- [c2] 2.A coil winding arrangement for a rotating electrical machine as set forth in claim 1 wherein the pole teeth encircled by the respective first and second coil windings are adjacent each other.
- [c3] 3.A coil winding arrangement for a rotating electrical machine as set forth in claim 1 wherein the total number of windings on each of the pole teeth is the same.
- [c4] 4.A coil winding arrangement for a rotating electrical machine as set forth in claim 3 wherein the total number windings on the pole teeth are sufficient to minimize the air gap between the respective, adjacent windings.

- [c5] 5.A coil winding arrangement for a rotating electrical machine as set forth in claim 1 wherein there are a number of taps formed at the ring portion to which respective ends of the coil windings are electrically connected.
- [c6] 6.A coil winding arrangement for a rotating electrical machine as set forth in claim 5 wherein two of the taps are disposed adjacent to two circumferentially adjacent pole teeth encircled by only one of the coil windings and are electrically connected to the respective ends of the coil winding of the adjacent pole tooth.
- [c7] 7.A coil winding arrangement for a rotating electrical machine as set forth in claim 5 wherein two of the taps are disposed adjacent to one pole tooth encircled by only both of the coil windings and each tap is electrically connected to one end of a respective one the coil windings.
- [c8] 8.A coil winding arrangement for a rotating electrical machine as set forth in claim 7 wherein one of the taps is electrically connected to an extension of the coil winding formed around a pole tooth circumferentially spaced from the pole tooth where the tap is located.
- [c9] 9.A coil winding arrangement for a rotating electrical machine as set forth in claim 8 wherein the remaining two of the taps are disposed adjacent to two circumfer-

entially adjacent pole teeth encircled by only one of the coil windings and are electrically connected to the respective ends of the coil winding of the adjacent pole tooth.

- [c10] 10. A coil winding arrangement for a rotating electrical machine as set forth in claim 9 wherein the pole teeth encircled by the respective first and second coil windings are adjacent each other.
- [c11] 11. A coil winding arrangement for a rotating electrical machine as set forth in claim 9 wherein the total number of windings on each of the pole teeth is the same.
- [c12] 12. A coil winding arrangement for a rotating electrical machine as set forth in claim 11 wherein the total number windings on the pole teeth are sufficient to minimize the air gap between the respective, adjacent windings.
- [c13] 13. A coil winding arrangement for a rotating electrical machine as set forth in claim 12 wherein the pole teeth encircled by the respective first and second coil windings are adjacent each other.
- [c14] 14. A coil winding arrangement for a rotating electrical machine comprising a ring having a plurality of radially extending pole teeth, a first coil winding having individual coils encircling a first number of circumferentially

spaced pole teeth and a second coil winding encircling a second number of circumferentially spaced pole teeth, four taps formed at said ring portion to which respective ends of said coil windings are electrically connected, two of said taps being disposed adjacent to two circumferentially adjacent pole teeth each encircled by a respective one of said coil windings and electrically connected to a respective end of the coil winding of the adjacent pole teeth, the remaining two of said taps being disposed adjacent to one pole tooth encircled by at least one of said coil windings and each of said remaining two of said taps being electrically connected to the other ends of a respective one of said coil windings.

- [c15] 15. A coil winding arrangement for a rotating electrical machine as set forth in claim 14 wherein one of the other two taps is electrically connected to an extension of the coil winding formed around a pole tooth circumferentially spaced from the pole tooth where the remaining tap of the other two taps is located.